



sequence list.ST25
SEQUENCE LISTING

<110> Leung, Shawn Shui-on

<120> REDUCING IMMUNOGENICITIES OF IMMUNOGLOBULINS BY FRAMEWORK-PATCHING

<130> 655

<140> US 09/892,613

<141> 2001-06-27

<160> 32

<170> PatentIn version 3.1

<210> 1

<211> 369

<212> DNA

<213> Full length cDNA sequence

<400> 1
gaagtgcagc tgctggagtc tgggggaggc ttagtgcagc ctggagggtc cctgaggctc 60
tcctgtcag cctctggatt ctccttcagt atctatgaca tgtcttggtt tcgccaggca 120
ccggaaagg ggctggagtg ggtcgatac attagtagtg gtgggtgtac cacctactat 180
ccagacactg tgaagggccg attcaccatc tccagagaca atgccaagaa ctcccgtac 240
ctgcaaatga acagtctgag ggtggaggac acagccttat attactgtgc aagacatagt 300
ggctacggta gtagctacgg gttttgttt gcttactggg gccaaaggac tctggtcact 360
gtctcttca 369

<210> 2

<211> 123

<212> PRT

<213> Full length amino acid sequence

sequence list.ST25

<400> 2

Glu Val Gln Leu Leu Glu Ser Gly Gly Gly Leu Val Gln Pro Gly Gly
1 5 10 15

Ser Leu Arg Leu Ser Cys Ala Ala Ser Gly Phe Ser Phe Ser Ile Tyr
20 25 30

Asp Met Ser Trp Val Arg Gln Ala Pro Gly Lys Gly Leu Glu Trp Val
35 40 45

Ala Tyr Ile Ser Ser Gly Gly Thr Thr Tyr Tyr Pro Asp Thr Val
50 55 60

Lys Gly Arg Phe Thr Ile Ser Arg Asp Asn Ala Lys Asn Ser Leu Tyr
65 70 75 80

Leu Gln Met Asn Ser Leu Arg Val Glu Asp Thr Ala Leu Tyr Tyr Cys
85 90 95

Ala Arg His Ser Gly Tyr Gly Ser Ser Tyr Gly Val Leu Phe Ala Tyr
100 105 110

Trp Gly Gln Gly Thr Leu Val Thr Val Ser Ser
115 120

<210> 3

<211> 111

<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 3
cctggagggt ccctgaggct ctcctgtgca gcctctggat tctccttcag tatctatgac 60
atgtcttggg ttccgcaggc accggaaag gggctggagt gggtcgata c 111

<210> 4

<211> 57

<212> DNA

<213> 5' Primer for N-template

sequence list.ST25

<400> 4	gaagtgcagc tgctggagtc tgggggaggc ttagtgcagc ctggagggtc cctgagg	57
<210> 5		
<211> 48		
<212> DNA		
<213> 3' Primer for N-template		
<400> 5	gttaggtggta ccaccaccac tactaatgta tgcgaccac tccagccc	48
<210> 6		
<211> 132		
<212> DNA		
<213> C-terminal sense strand template DNA sequence		
<400> 6	ttcaccatct ccagagacaa tgccaagaac tccctgtacc tgcaa atgaa cagtctgagg	60
gtggaggaca cagccttata ttactgtgca agacatagtg gctacggtag tagctacggg		120
gttttgtttg ct		132
<210> 7		
<211> 60		
<212> DNA		
<213> 5' Primer for C-template		
<400> 7	ggtgttacca cctactatcc agacactgtg aagggccat tcaccatctc cagagacaat	60
<210> 8		
<211> 57		
<212> DNA		
<213> 3' Primer for C-template		
<400> 8	tgaagagaca gtgaccagag tcccttggcc ccagtaagca aacaaaaccc cgtagct	57

sequence list.ST25

<210> 9

<211> 321

<212> DNA

<213> Full length cDNA sequence

<400> 9

gatatccaga tgacccagtc tccatcctcc ctgtctgcct ctgtgggaga cagagtcacc 60
attagttgca gggcaagtca ggacattagc aattattaa actggtatca gcagaaacca 120
ggtaaggctc cgaaactcct gatctactac actagtatat tacactcagg agtcccacca 180
aggttcagtg gcagtgggtc tggAACAGAA tttactctca ccattagctc cctgcagcca 240
gaagattttg ccacttactt ttgccaacag ggtataacgc ttccgtggac gttcggtgga 300
ggcaccaagg tggAAATCAA A 321

<210> 10

<211> 107

<212> PRT

<213> Full length amino acid sequence

<400> 10

Asp Ile Gln Met Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Ser Cys Arg Ala Ser Gln Asp Ile Ser Asn Tyr
20 25 30

Leu Asn Trp Tyr Gln Gln Lys Pro Gly Lys Ala Pro Lys Leu Leu Ile
35 40 45

Tyr Tyr Thr Ser Ile Leu His Ser Gly Val Pro Ser Arg Phe Ser Gly
50 55 60

Ser Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro
65 70 75 80

Glu Asp Phe Ala Thr Tyr Phe Cys Gln Gln Gly Asn Thr Leu Pro Trp
85 90 95

Thr Phe Gly Gly Thr Lys Val Glu Ile Lys
100 105

sequence list.ST25

<210> 11
<211> 108
<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 11
ctgtctgcct ctgtggaga cagagtacc attagttca gggcaagtca ggacatttcg 60
aattattnaa actggtatca gcagaaacca ggtaaggctc cgaaactc 108

<210> 12
<211> 51
<212> DNA
<213> 5' Primer for N template

<400> 12
gatatccaga tgacccagtc tccatcctcc ctgtctgcct ctgtggaga c 51

<210> 13
<211> 40
<212> DNA
<213> 3' Primer for N-template

<400> 13
ataatactgt gtagtagatc aggagttcg gagccttacc 40

<210> 14
<211> 120
<212> DNA
<213> C-terminal sense strand template DNA sequence

<400> 14
ccatcaaggt tcagtggcag tgggtctgga acagaattta ctctcaccat tagctccctg 60
cagccagaag attttgccac ttactttgc caacaggta atacgcttcc gtggacgttc 120

<210> 15

sequence list.ST25

<211> 49

<212> DNA

<213> 5' Primer for C-template

<400> 15

ctacactagt atattacact caggagtccc atcaaggttc agtggcagt 49

<210> 16

<211> 48

<212> DNA

<213> 3' Primer for C-template

<400> 16

tttgatttcc accttggtgc ctccaccgaa cgtccacgga agcgtatt 48

<210> 17

<211> 371

<212> DNA

<213> Full length cDNA sequence

<400> 17

caggtgcaac tggtggcttc cggggctgag gtaaataagc ctggggcctc agtgaaggtc 60

tcctgcaagg cttctggcta cacatttacc agttacaata tgcaactgggt acggcagcct 120

ccttggaaagg gccttggaatg gattggagct atttatccag gaaatggtga tactagttac 180

aatcagaaaat tcaagggcaa ggccacattt actgcagaca aatcctccag cacagcctac 240

atgcagctca gcagtctgac atctgaggac tctgcggctt attactgtgc aagatcgcac 300

tacggtagta actacgtaga ctactttgac tactggggcc aaggcaccac tgttacagtc 360

tcctctgatc a 371

<210> 18

<211> 123

<212> PRT

<213> Full-length amino acid sequence

sequence list.ST25

<400> 18

Gln Val Gln Leu Val Ala Ser Gly Ala Glu Val Asn Lys Pro Gly Ala
1 5 10 15

Ser Val Lys Val Ser Cys Lys Ala Ser Gly Tyr Thr Phe Thr Ser Tyr
20 25 30

Asn Met His Trp Val Arg Gln Pro Pro Gly Arg Gly Leu Glu Trp Ile
35 40 45

Gly Ala Ile Tyr Pro Gly Asn Gly Asp Thr Ser Tyr Asn Gln Lys Phe
50 55 60

Lys Gly Lys Ala Thr Leu Thr Ala Asp Lys Ser Ser Ser Thr Ala Tyr
65 70 75 80

Met Gln Leu Ser Ser Leu Thr Ser Glu Asp Ser Ala Val Tyr Tyr Cys
85 90 95

Ala Arg Ser His Tyr Gly Ser Asn Tyr Val Asp Tyr Phe Asp Tyr Trp
100 105 110

Gly Gln Gly Thr Thr Val Thr Val Ser Ser Asp
115 120

<210> 19

<211> 114

<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 19

aataaggcctg gggcctcagt gaagggtctcc tgcaaggctt ctggctacac atttaccagt 60

tacaatatgc actgggtacg gcagcctcct ggaaggggcc tggaatggat tggaa 114

<210> 20

<211> 57

<212> DNA

<213> 5' Primer for N-template

<400> 20

caggtgcaac tggtggttc cggggctgag gtaaataagc ctggggcctc agtgaag 57

sequence list.ST25

<210> 21
<211> 55
<212> DNA
<213> 3' Primer for N-template

<400> 21
tgtaactagt atcaccattt cctggataaaa tagctccaat ccattccagg cccct 55

<210> 22
<211> 126
<212> DNA
<213> C-terminal sense strand template DNA sequence

<400> 22
ttgactgcag acaaatcctc cagcacagcc tacatgcagc tcagcagtct gacatctgag 60
gactctgcgg tctattactg tgcaagatcg cactacgta gtaactacgt agactacttt 120
gactac 126

<210> 23
<211> 61
<212> DNA
<213> 5' Primer for C-template

<400> 23
tgataactagt tacaatcaga aattcaaggg caaggccaca ttgactgcag acaaatcctc 60
c 61

<210> 24
<211> 59
<212> DNA
<213> 3' Primer for C-template

<400> 24
tgatcagagg agactgtaac agtgggtgcct tggccccagt agtcaaagta gtctacgta 59

sequence list.ST25

<210> 25

<211> 321

<212> DNA

<213> Full-length cDNA sequence

<400> 25
gatattcaac tcacacagtc tccatcaagt ctttctgcac ctgtggggga cagagtcaca 60
attacttgca gggccagctc aagtttaagt ttcatgcact ggtaccagca gaagccagga 120
tcctccccca aaccctggat ttatgccaca tccaacctgg cttccggagt ccctagtcgc 180
ttcagtgca gtgggtctgg gaccgagttc actctcacaa tcagcagttt gcagcctgaa 240
gatttcgcca cttatctcg ccatcagtgg agtagtaacc cgctcacgtt cggtgctggg 300
accaagctga ccgttctacg g 321

<210> 26

<211> 107

<212> PRT

<213> Full-length amino acid sequence

<400> 26

Asp Ile Gln Leu Thr Gln Ser Pro Ser Ser Leu Ser Ala Ser Val Gly
1 5 10 15

Asp Arg Val Thr Ile Thr Cys Arg Ala Ser Ser Ser Leu Ser Phe Met
20 25 30

His Trp Tyr Gln Gln Lys Pro Gly Ser Ser Pro Lys Pro Trp Ile Tyr
35 40 45

Ala Thr Ser Asn Leu Ala Ser Gly Val Pro Ser Arg Phe Ser Gly Ser
50 55 60

Gly Ser Gly Thr Glu Phe Thr Leu Thr Ile Ser Ser Leu Gln Pro Glu
65 70 75 80

Asp Phe Ala Thr Tyr Phe Cys His Gln Trp Ser Ser Asn Pro Leu Thr
85 90 95

Phe Gly Ala Gly Thr Lys Leu Thr Val Leu Arg
100 105

sequence list.ST25

<210> 27

<211> 129

<212> DNA

<213> N-terminal sense strand template DNA sequence

<400> 27

tcaagtcttt ctgcatctgt gggggacaga gtcacaatta cttgcaggc cagctcaagt 60

ttaagttca tgcactggta ccagcagaag ccaggatcct ccccaaacc ctggatttat 120

gccacatcc 129

<210> 28

<211> 45

<212> DNA

<213> 5' Primer for N-template

<400> 28

gatattcaac tcacacagtc tccatcaagt ctttctgcat ctgtg 45

<210> 29

<211> 40

<212> DNA

<213> 3' Primer for N-template

<400> 29

ggactccgga agccaggttg gatgtggcat aaatccaggg 40

<210> 30

<211> 120

<212> DNA

<213> C-terminal sense strand template DNA sequence

<400> 30

ttcagtgcca gtgggtctgg gaccgagttc actctcacaa tcagcagttt gcagcctgaa 60

gatttcgcca cttatattctg ccatcagtgg agtagtaacc cgctcacgtt cggtgctggg 120

sequence list.ST25

<210> 31

<211> 43

<212> DNA

<213> 5' Primer for C-template

<400> 31 ggcttccgga gtccctagtc gcttcagtgg cagtgggtct ggg 43

<210> 32

<211> 42

<212> DNA

<213> 3' Primer for C-template

<400> 32 ccgtagaacg gtcagcttgg tccccagcacc gaacgtgagc gg 42